Adoption Lab script

SAP SuccessFactors requirements for “Automate Pre-Screen Questions for SuccessFactors Job Requisitions” bot

This document contains detailed instructions on the necessary changes in SAP SuccessFactors to run the bot “Automate Pre-Screen Questions for SuccessFactors Job Requisitions”.

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Assumptions and required permissions

The document assumes the following:

- Job Requisition templates have been set up
- An approval process for the job requisition has been set up in Route Maps
- A Question Library has been set up
- Pre-screen questions are enabled and configured in the job requisition template using the default *questions* field
- There's a recruiting operator not used

Throughout this guide, the following tools will be accessed:

- Manage permission Roles
- Manage permission Groups
- Reset User Passwords
- Password & Login Policy Settings
- Manage Recruiting Groups
- Manage Recruiting Team Settings
- Picklist Center
- Configure Object Definitions
- OData API Metadata Refresh and Export
- Import and Export Data
- Manage Data
- Manage Route Maps
- Manage Templates

HXM Configuration

Prepare Bot User

The bot will communicate with SAP SuccessFactors using the OData v2 API.

We recommend creating a specific user for RPA bots. This way, all actions performed by the bot can be traced.

Follow the blog to create a new API user: SuccessFactors Integrations Beginners Guide- API User Creation and Connectivity. Follow this blog until **step 9**.

Give permission to the user

The next step is to give the bot user all needed permissions. For that, you will create a new *permission role*, assign permissions, create a *permission group* and assign the bot to that group.

1. Go to to *Manage Permission Groups* and click on *Create New*.
2. In the *Definition* tab, give the group a name, and assign the bot user as group member
3. Click on *Done* to save the changes.
4. Go to *Manage Permission Roles* and click on *Create New*.
5. Give a name and description.
6. Click on *Permission…* to assign the following permissions:
    - General User Permission:
        - User Login
    - Recruiting Permissions:
        - OData API Job Requisition Export
        - OData API Job Requisition Create
        - OData API Job Requisition Update
    - Metadata Framework:
        - Access to non-secured objects (if object is not secured)
    - Manage integration tools:
        - Allow Admin to Access OData API through Basic Authentication
        - Manage OData API Basic Authentication
7. Grant the role to the permission group created before.
8. Click on *Save Changes*.

Set IP exceptions

The bot will use basic authentication to communicate with SAP SuccessFactors. By default, access to basic authentication is restricted, so you need to set an exception.

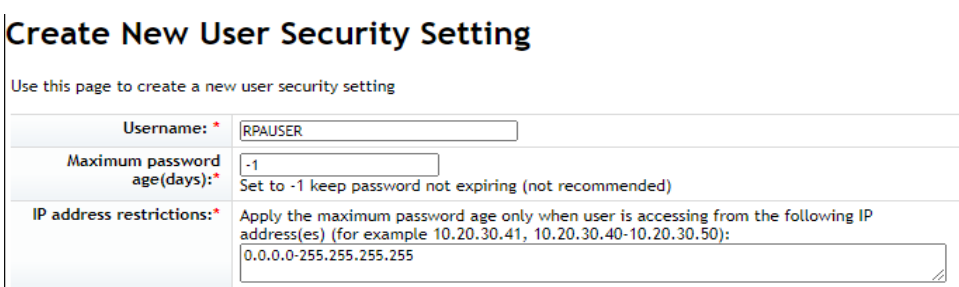
1. Go to *OData API Basic Authentication Configuration*
2. Change the policy to one of these two options:
   - Always (to allow any IP to use basic authentication as a means of API authentication)
   - Restrict access to below IPs (if you know the IP range where the bot will connect from)

> *The bot will be executed from a virtual machine, either locally in your corporate network or in the cloud. If you know the IP range the virtual machine will use, we recommend to add just that IP range.*

Make the password valid forever

Your SAP SuccessFactors instance is probably enforcing a certain password policy and maximum validity. To not have to update the password every other time, it's a good idea to make an exception and keep the bot user password valid forever.

1. Go to *Password & Login Policy Settings*.
2. Add the bot user to the list in *Set API login exceptions…*:
   - Maximum password age: -1
   - IP addresses: Similar as the previous step, you can choose either:
     - To allow any IP, type: `0.0.0.0-255.255.255.255`
     - If you know the IP range, you can restrict it here



Reset password

Now it’s time to set the password for the bot user.

1. Go to *Reset User Passwords*
2. Type the bot user username and click on *Search Users*
3. Select the user in the results and set a new password.
4. Click on *Reset user password* to confirm.

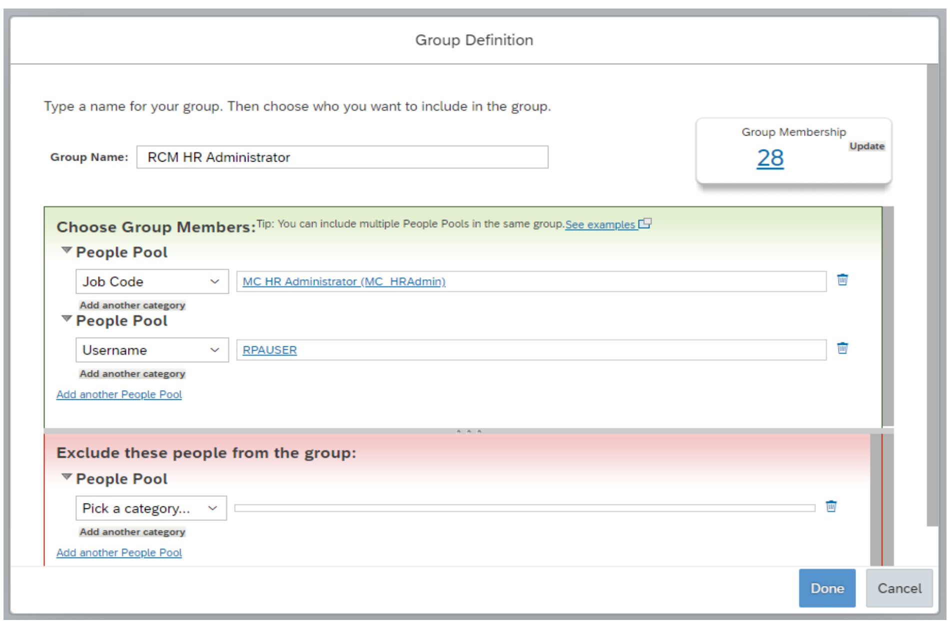
You should see a success message.

Add bot user to recruiting operators

To be able to automatically assign the job requisition to the bot user when the job requisition is created, you will make the bot user a recruiting operator. You can use any operator that you are not using at the moment.

1. Go to *Manage Recruiting Groups*.
2. Select the recruiting group where you want to add the bot user and click *Edit*.
3. Add the bot user to the group, then click *Done*

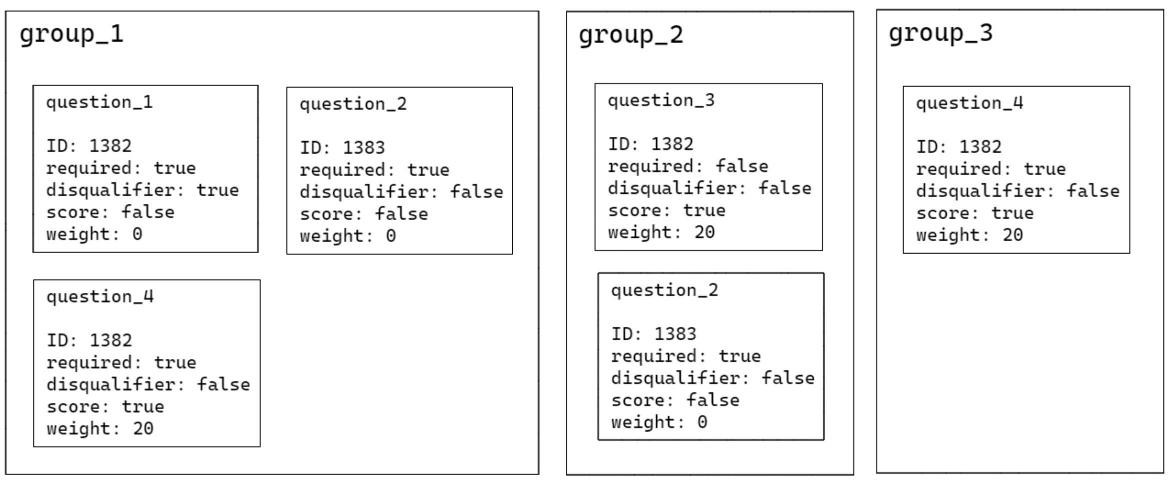
> *Note down the recruiting operator group where you added the bot user. You will need it later to permission fields in the job requisition template.*



Define and populate MDF objects

The bot relies on two custom MDF objects, and you will need an auxiliary picklist. The structure is the following:

- A picklist will include the different question types (multi choice, numeric, open text…)
- An MDF object that will hold the questions, the info stored here will be:
  - Question ID
  - Question type (from the previous picklist)
  - If is required
  - If is disqualifier
  - If is scored
  - Score weight
- An MDF object that will group the previous question object



Example on how questions and groups objects will work

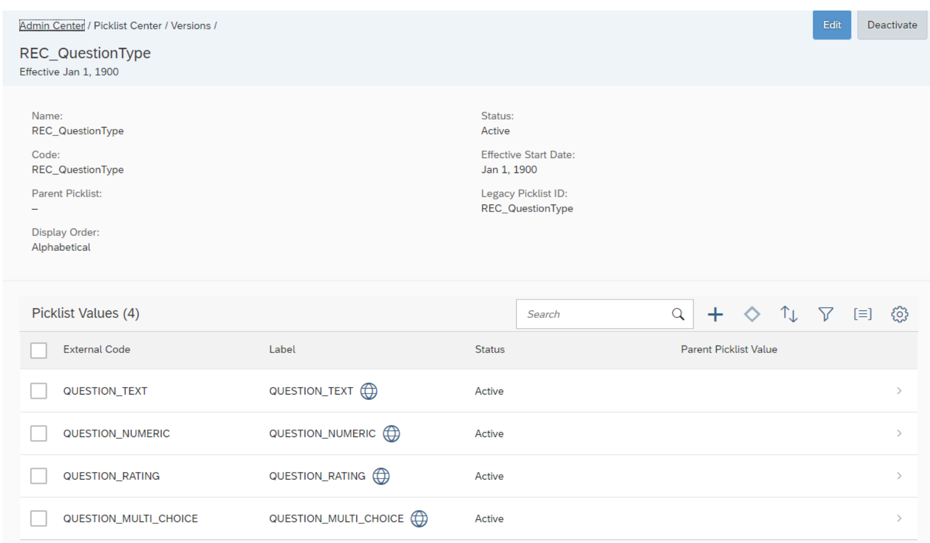
You will create different question groups, based on your needs. Later, you will add the question group MDF object to the job requisition template. This way, you will be able to set a group of questions to a job requisition in one step.

Define picklist with question types

To make the question creation simpler, you will create a picklist with the different question types there are in SuccessFactors.

1. Go to *Picklist Center* and click in the ➕ (plus) button to create a new picklist
2. Give it a unique code and a name.
3. Make sure it's active and *Effective Start Date* is set to *1st of January 1990*. Click *Save*.
4. Click in the ➕ (plus) button to add the following values (for both *External Code* and *Label*):
   - QUESTION_MULTI_CHOICE
   - QUESTION_TEXT
   - QUESTION_NUMERIC
   - QUESTION_RATING
5. Changes are saved automatically, so you can simply exit the tool.

> *Note down the the picklist code. You will need it in the next step.*



Define MDF Objects

Here you will define the two MDF objects: one for questions and the other to group questions.

> ⚠️ *MDF objects are secured by default. This means explicit permissions have to be given to create, read, update and delete object entries. This is done in* Manage Permission Roles*, and the permissions are under* Miscellaneous Permissions*. At least,* Visibility *permissions need to be given to admins, recruiting operators and the bot user. You can disable this during object definition by switching* Secured *to* No

Question object

This object will store pre-screen questions with the required attributes (required, disqualifier, score…).

1. Go to *Configure Object Definitions*
2. In the *Create New*, select *Object Definition*. Set the following details:
   - Code: This will be the name of the object, you can choose any name
   - Effective Dating: Basic
   - API visibility: Choose at least Read-only
   - Status: Active
3. Add the custom fields of the next table (type the name, the `cust_` prefix is added automatically):

> ⚠️ *Follow the instructions on the naming of the object **custom fields**. The bot relies on hardcoded names and it won't work if those names don't follow the instructions given here.*

We strongly recommend setting fields as required and setting default values as shown in the table. To do so, click in *Details* for each field and set *Default value* and *Required* accordingly. This will save time when setting the questions and will avoid errors with the API.

Name	**Required**	**Type**	**Default value**	**Comments**
questionID	yes	Number		
questionType	yes	Picklist		Set *Valid Values Source* to the picklist code from before
required	yes	Boolean	false	
disqualifier	yes	Boolean	false	
score	yes	Boolean	false	

questionWeight	yes	Number	0	

4. Click on *Save* to save the object

> *Note down the object name. This will need to be specified to the bot.*

Question group object

In a similar way, create the object that will group the questions:

1. Go to *Configure Object Definitions*
2. In the *Create New*, select *Object Definition*. Set the following details:
   - Code: This will be the name of the object, you can choose any name
   - Effective Dating: Basic
   - API visibility: Choose at least Read-only
   - Status: Active
3. Add the following association:

   > *Follow the instructions on the naming of the object **association**. The bot relies on hardcoded names and it won't work if those names don't follow the instructions given here.*

   - Name: Code of the question object
   - Multiplicity: One to Many
   - Destination Object: Choose the question object created before
   - Type: Valid When
   - Click in *Details* and set *Required* to *yes*.
4. Click on *Save* to save the object

> *Note down the object name. This will need to be specified to the bot.*

> *Depending on the criteria you want to use to organize the question groups (job code, country, job family,…) you can add an extra association in this object. E.g.: If using job code to group questions, a 1:1 association can be added in the question group object. You can leverage business rules shown later in this guide to automatically assign a question group on the job requisition.*

Populate objects

With the object definition in place, it's time to populate them with questions, and to group these questions. You can add data manually using *Manage Data* tool, or use *Import and Export Data* tool to batch add data.

Upload data using *Import and Export Data*

To import data via excel, you can do the following.

To download the CSV template:

1. Go to *Import and Export Data*
2. In *Select the action to perform*, choose *Download Template*
3. Select the question object and click *Download*

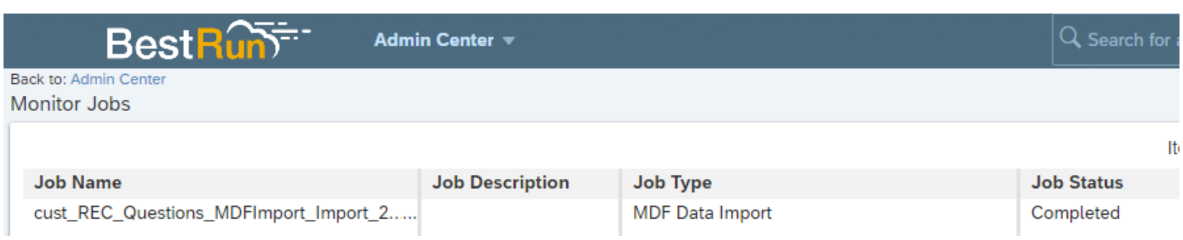
To upload the CSV:

1. Go to *Import and Export Data*
2. In *Select the action to perform*, choose *Import Data*
3. Select the question object
4. Select the file from your computer
5. Leave the rest of the options as they are (change the *File Encoding* only if you know what you are doing)
6. Click on *Import*

The required fields from the *Question Libraries* are:

Name	**Where to find it**
questionID	In the list of questions, the column *ID* (**not** the *GUID)*
questionType	Exporting the library of questions, or checking each question. Use the values from the picklist created before

You can monitor the status of the import job going to *Monitor Jobs*.



Customize manually using *Manage Data*

To add the data from SAP SuccessFactors interface, you can use *Manage Data*:

To create a new entry:

1. Go to *Manage Data*
2. Next to *Create New*, select the object

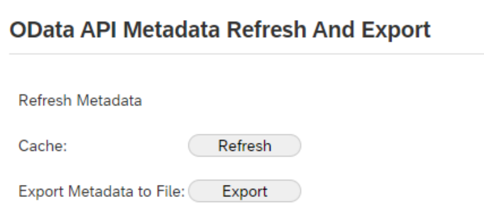
To edit an existing entry:

1. Go to *Manage Data*
2. Next to *Search*, select the question object, then select the entry
3. Click on *Take Action* and choose *Make correction*

Do an OData refresh

As we have done some changes on the available entities in the API (we created two objects), we will need to do an OData Refresh to make sure the bot will be able to reach our new objects.

1. Go to *OData API Metadata Refresh And Export*
2. Next to *Cache*, click *Refresh*



Recruiting configuration

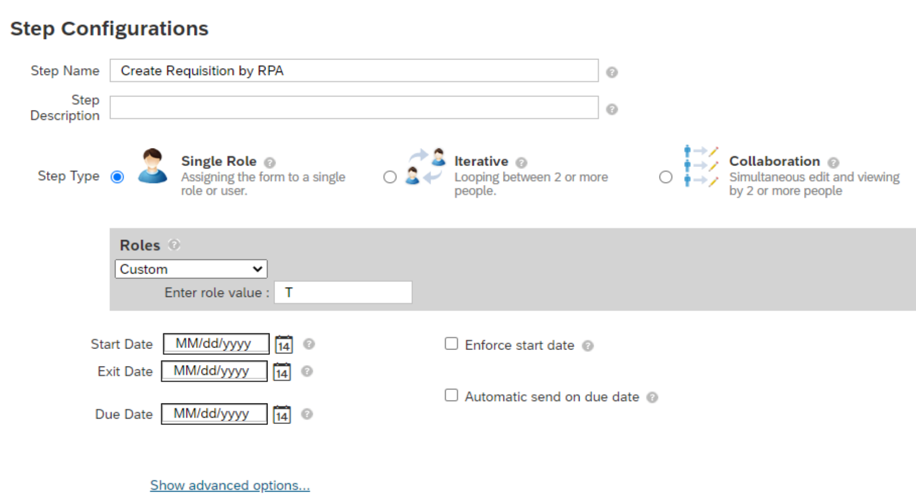
All necessary elements are already set up. Now you need to integrate the bot in your recruiting process.

Create/Modify Route Map

The bot relies on having a specific route step in the job requisition approval process. Think of it as the bot inbox. You need to add an additional step in the route map used for the job requisitions.

> *If you are using Position Management to create job requisitions, we recommend to put the bot step at the beginning of the route map. It is possible to create a business rule that will populate the custom field (added in the next step) at the moment the requisition is created.*
>
> *If you create job requisitions from scratch, copying from other requisitions or using job profiles, it's better to keep the first step for setting the required information. You can still leverage business rules to automatically populate the custom field before sending the requisition to the bot step.*

1. Go to *Manage Route Maps*
2. You can create a new route map, duplicate, or simply edit the one it is being used.
3. Add a new step with in the *Modify Stage*. You can choose any name.
   - Step Type: Single role
   - Roles: Custom
     - Enter role value: Choose the recruiting operator where you assigned the bot user (see reference here)
   - Click on *Show advanced options* to further customize texts and descriptions.
4. Place the step in the desired order



> *Note down the step name. This will need to be specified to the bot.*

> *Do not place the bot step the last, ensure there's human validation before the job requisition is approved.*

> *If a new route map is created, change the associated route map for the job requisition template in Manage Recruiting Form Settings*

Edit the Job Requisition template

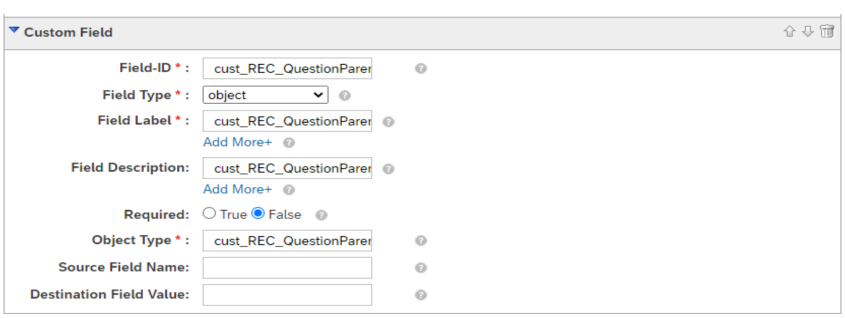
In order to use the bot, you need to adapt the job requisition template, including the question group object as a custom field. Here is how you can do it.

> *Only the question group object needs to be added. The question object is not needed here.*

Add the custom field to the job requisition template

> *Follow the instructions on the naming of the custom field **Field-ID**. The bot relies on hardcoded names and it won't work if those names don't follow the instructions given here.*

1. Go to *Manage Templates*, *Recruiting Management* tab and select *Job Requisition*.
2. Select the job requisition template you want to modify to include the bot automation
3. Click in *Fields defined. Click to modify*.
4. In the *Add* dropdown, choose *Add custom field*. Fill the required fields with:
   - Field-ID: Code of the question group object
   - Field Type: object
   - Field Label: Any label you like
   - Object Type: Code of the question group object
5. Click on *Done* to save.



Permission the new field

It's a good idea to give *write* permission to the question group field to some recruiting operators. This will allow them to change the value if necessary, or choose a value if creating a job requisition from scratch. The bot doesn't need any permission here because it will access the information through API, and API is controlled with role based permissions.

To give a recruiting operator read or write permissions to the question group object you have two approaches: update existing permission blocks or create a new block. We recommend updating the existing blocks.

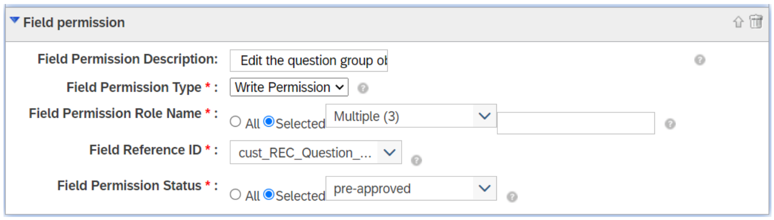
Update existing permission blocks

1. Still in *Manage Templates*, *Recruiting Management* tab, *Job Requisition* and in the job requisition template.
2. Click in *Field Permissions defined. Click to modify*.
3. Look for blocks that:
   - Have the relevant recruiter operators selected in *Field Permission Role Name*
   - Have read or write (as required) as *Field Permission Type*
   - Have the relevant status in *Field Permission Status*
4. In those blocks add the question group object opening the dropdown of *Field Reference ID* and selecting the field
5. Click on *Done* to save.
6. Click on *Publish* to save the job requisition template

Create a new permission block

1. Still in *Manage Templates*, *Recruiting Management* tab, *Job Requisition* and in the job requisition template.
2. Click in *Field Permissions defined. Click to modify*.
3. Create a new permission block clicking on *Add field permission* and choose:
   - *Field Permission Description*: Explain the purpose of the permission block
   - *Field Permission Type*: Read or Write permission
   - *Field Permission Role Name*: Click *Select* and select the relevant recruiting operators
   - *Field Reference ID*: Click *Select* and select the question group field
   - *Field Permission Status*: Click *Select* and select the relevant stages
4. Click on *Done* to save.
5. Click on *Publish* to save the job requisition template

Three recruiting operators have write access to the question group object, during the pre-approved stage:



Three recruiting operators have write access to the question group object, during the pre-approved stage

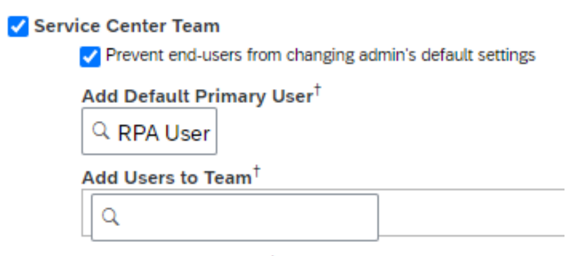
Set Recruiting team options

Here is where you can set the bot user to be automatically assigned to newly created job requisitions.

> *To be able to configure this, the standard team field of the recruiting operator used for the bot must be present in the requisition.*

1. Go to *Manage Recruiting Team Settings*
2. Select the job requisition template where the bot automation was added
3. Activate the checkbox of the recruiting operator where you added the bot user
4. We recommend to activate the *Prevent end-users from changing admin's default settings* checkbox
5. Include the bot user in *Add Default Primary User*

Set the RPA user as the default operator when the job req is created:



Create a Business Rule

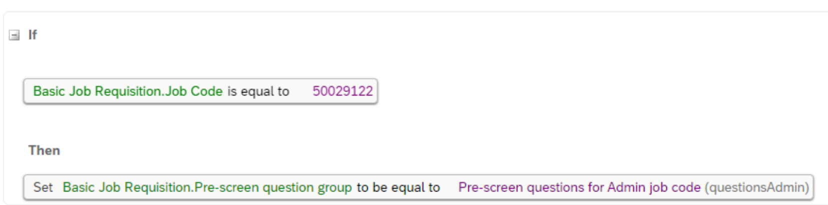
Business Rules can be use to automatically set the value of the question group field in the job requisition based on other information of the requisition, e.g.: job code, location, etc

> *If you are using Position Management to create job requisitions, it is possible to create a business rule that will populate the custom field at the moment the requisition is created.*

> *If you create job requisitions from scratch, copying from other requisitions or using job profiles, you can still leverage business rules, but they will be triggered either on save (when the job requisition is saved to be sent to the next step) or on change (when a specific field is modified).*

1. Go to *Configure Business Rules*
2. Click on + (plus) to create a new Business Rule
3. Open the *Basic* dropdown and select the *basic* option. Fill in the fields:
   - Rule Name: No specific requirements
   - Rule ID: No specific requirements
   - Start Date: Today or a date in the past
   - Base Object: Job Requisition (All) (or select a specific job requisition template)
4. Click on *Continue*

Set up the rule based on your requirements. The example below uses job codes.

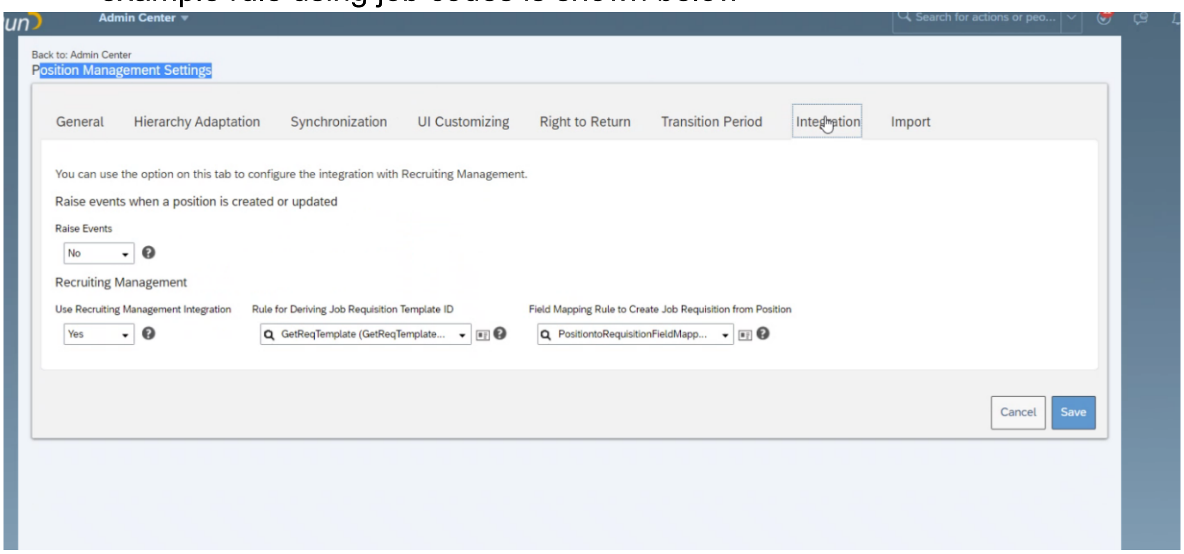


Once the rule is configured, apply it to the job requisition.

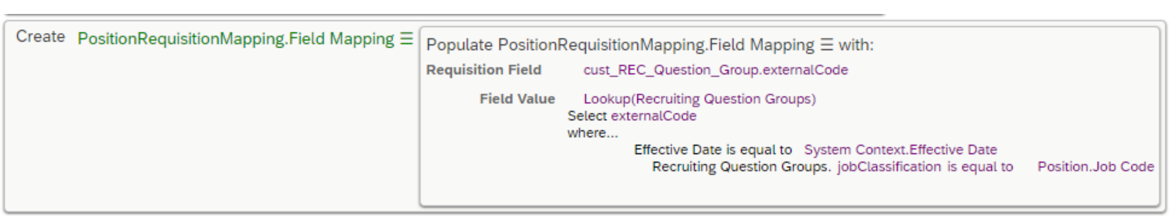
If using Position Management

You can include an expression in the rule that maps fields from the position to the job requisition. To find an modify that rule:

1. Go to *Position Management Settings*.
2. Open the *Integration* tab. In the *Recruiting Management* section, you should have *Use Recruiting Management Integration* marked as *Yes*.
3. Click in the icon Under *Field Mapping Rule to Create Job Requisition from Position*, to access the business rule that maps info from the position to the job requisition
4. Open the *Take Action* dropdown and select *Make Correction* to edit the rule
5. Hover the mouse on the *Then* block and click on *Add Expression*. Scroll to the bottom to see the new expression
6. Follow the process as on the other expressions to add a new mapping. An example rule using job codes is shown below



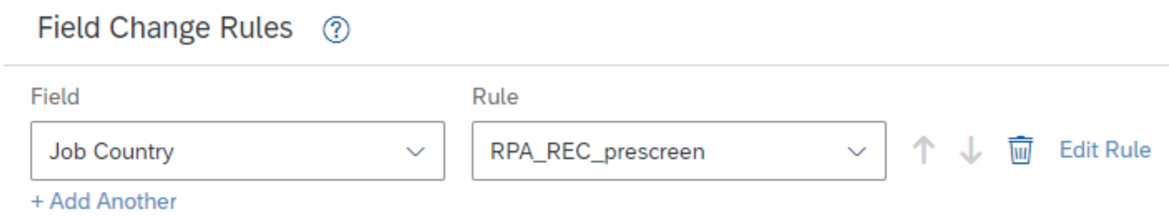
Integration tab in Position Management Settings



Example rule using job codes. An additional association was added to the question group object

If not using Position Management

1. Go to *Manage Rules in Recruiting*
2. In the *Job Requisition tab*, select the job requisition template where the bot automation was added
3. In the *Field Change Rules* add a new rule clicking in + *Add Another*:
   - Field: Choose the field your rule is based on
   - Rule: Select the rule created before

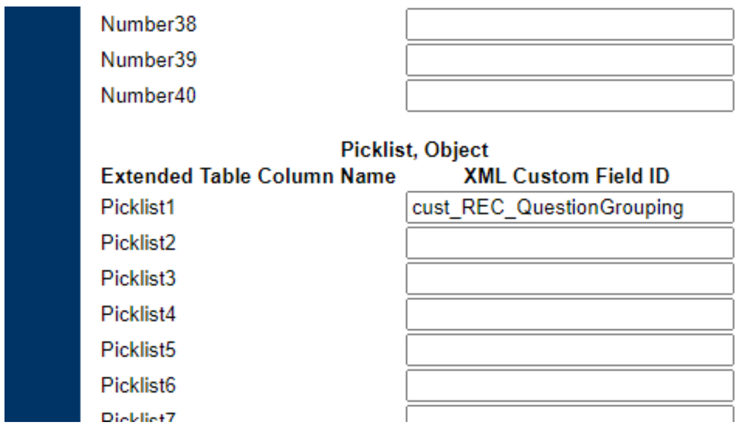


Optional tasks

Make the question group field reportable

If you want to be able to report the custom object added in the job requisition, you will have to add it as a reportable field. This is done through Provisioning:

1. Go to Provisioning an look for *Configure Reportable Custom Fields*
2. Add the question group (using the *Field ID*) field under the section *Picklist, Object* section



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